



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,181	02/28/2002	Akiko Kuwayama	0378-0386P	4914
2292	7590	02/28/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			DANIELS, ANTHONY J	
			ART UNIT	PAPER NUMBER

2615

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/084,181

Applicant(s)

KUWAYAMA, AKIKO

Examiner

Anthony J. Daniels

Art Unit

2615

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/28/01
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 9 is rejected under 35 U.S.C. 102(e) as being anticipated by Steinberg et al. (US 6,433,818).

As to claim 9, Steinberg et al. teaches a method of personal identification for use in a digital camera (see Col. 2, Lines 3-6), comprising the steps of: inputting fingerprint data to the digital camera (see Figure 10, Figure 12; Col. 6, Lines 5-10); checking if the inputted fingerprint data is identical with fingerprint data registered with a fingerprint register of the digital camera (see Col. 6, Lines 10-15); and registering the inputted fingerprint data having an identifier with the fingerprint register in the case no fingerprint data is registered with the register (*This action is inherent in the system of Steinberg et al., in that a database would have to be created in order for the camera to operate as explained.*).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,2,4-6,8,11,12 rejected under 35 U.S.C. 103(a) as being unpatentable over Steinberg et al. (see Patent number above) in view of Ohmura (US 20030035054).

As to claim 1, Steinberg et al. teaches a digital camera (see Figure 1, digital camera “18”) for picking up a scene with an image sensor (see Figure 10, Figure 2, image acquisition “46”) and forming a frame of image data representative of the scene with a signal processor (see Figure 2, processor “32”), comprising: a fingerprint sensor provided on an exterior of said digital camera for sensing a fingerprint to produce inputted fingerprint data (see Figure 12; Col. 7, Lines 64-67; Col. 8, Lines 1,2; *{The shutter release button is considered part of the fingerprint sensor.}*); a fingerprint register for registering fingerprint data (see Col. 6, Lines 5-15, “...signature database,”); a memory for storing therein frames of image data (see Figure 2, memory “42”; Col. 3, Lines 50-59); a comparison circuit comparing the inputted fingerprint data with the fingerprint data registered with said fingerprint register to produce identified fingerprint data (see Col. 6, Lines 5-15; *{The comparison takes place in the digital camera; therefore, a circuit for comparing fingerprint data is inherently in it.}*); an authorizer for storing information (see Figure 2, memory “42”; *{The authorizer is being interpreted by examiner as a memory as*

Art Unit: 2615

*taught in the specification ([0036]); a user interface circuit for inputting an instruction to said digital camera (see Figure 2, keypad “12”; Col. 3, Lines 50-54); and a controller (see Figure 2, processor “32”) for accessing said authorizer (see Figure 2, bus line “44”) and executing an instruction if the instruction is intended to handle a frame of image data \*(see Col. 3, Lines 61-63; {The processor executes the instruction of displaying an image on the display. This instruction is intended to handle a frame of image data.}).* The claim differs from Steinberg et al. in that it further requires that a specific identifier is allotted with the fingerprint data, a frame of data is associated with the specific identifier, the authorizer storing the identifier specific to the fingerprint data, and the controller references the identifier stored in said authorizer *\*(Image data associated with the identifier has already been cited as a difference between claim 1 and Steinberg et al; particularly, when it is said that the claim differs from Steinberg et al. in that it further requires a frame of data associated with the specific identifier.).*

In the same field of endeavor, Ohmura teaches associating photographers whom inherently have different fingerprint data with a specific folder name (identifier) (see Figure 38; image data “title” with photographer “Taro Hanako Ichiro”), a frame of data associated with the specific folder name (see Figure 38, fishing belonging to Taro Hanako Ichiro’s folder), an authorizer storing the identifier specific to the image data (see Figure 2, memory “4f”), and a controller referencing the identifier stored in said authorizer (see Figure 2, CPU “4e”; [0074], Lines 13-20). In light of the teaching of Ohmura, it would have been obvious to one of ordinary skill in the art at the time the invention was made to associate the photographers having different fingerprint data with a specific folder name *(Note that Ohmura teaches the storage of image data according to photographer ([0211], Lines 1-3) in the memory of Steinberg et al., because an*

Art Unit: 2615

artisan of ordinary skill in the art would recognize that this would allow the owner of Steinberg et al.'s camera to quickly identify what image data belongs to which renter of the digital camera and to efficiently sort and retrieve files according to photographers.

As to claim 2, Steinberg et al., as modified by Ohmura, teaches the digital camera in accordance with claim 1, further comprising a shutter release button on which said fingerprint sensor is provided (see Figure 12, Col. 7, Lines 64-67; Col. 8, Lines 1-6; *{The shutter release button comprises the transparent layer upon which the fingerprint is sensed which is considered part of the sensor.}*).

As to claim 4, Steinberg et al., as modified by Ohmura, teaches the digital camera in accordance with claim 1, wherein frames of image data stored in said memory are associated one of the identifiers so that the frames are separately stored in one or more folders prepared in said memory (see Ohmura, Figure 38, fishing belonging to Taro Hanaka Ichiro's folder), said fingerprint register registers therewith folder names for the identifiers, and said authorizer stores therein a folder name (*This is inherent in the system of Steinberg et al., as modified by Ohmura, in that the folder names are stored along with the images.*).

As to claim 5, Steinberg et al., as modified by Ohmura, teaches the digital camera in accordance with claim 4, wherein the folders in said memory may be grouped under one or more super folders (see Ohmura, Figure 22, Taro's folder "Taro Insects" is grouped under the calendar year folders), and the fingerprint data registered with said fingerprint register may have folder names of the super folders (*Examiner considers applicant's "may" language to not render the limitation in the claim a necessity.*). It would have been obvious to one of ordinary skill in the art

Art Unit: 2615

at the time the invention was made to store fingerprint data taught in Steinberg et al. in a super folder in order to facilitate retrieving and searching of desired image files.

As to claim 6, Steinberg et al., as modified by Ohmura, teaches the digital camera in accordance with claim 4, further comprising a record control circuit for storing a folder name specific the fingerprint identified by said comparison circuit (see Ohmura, Figure 2, memory "4f"; *{It is inherent in the system of Ohmura that a circuit control the recording of the folder into memory "4f".}*), said controller recording, response instruction to record a frame of image data formed by said digital camera, the frame into a folder having the folder name (*It is inherent in the system of Ohmura that image data be recorded into the folder name by instruction; without instruction you have perpetual storage.*).

As to claim 8, Steinberg et al., as modified by Ohmura, teaches the digital camera in accordance with claim 1, wherein said authorizer stores no identifier as long as no fingerprint data is identified by said comparison circuit (*It is inherent in the system of Steinberg et al., as modified by Ohmura, that a folder name would not be stored if a corresponding fingerprint data did not exist.*), said controller executing, in response to an instruction to register new fingerprint data with said fingerprint register, the instruction in the case said authorizer contains a folder name specific to the fingerprint data registered with said register (*It is inherent in the system of Steinberg et al., as modified by Ohmura, that fingerprint data be registered in the signature database of Steinberg et al., if a folder name for the user exists.*).

As to claim 11, Steinberg et al., as modified by Ohmura, teaches the method in accordance with claim 10, further comprising the steps of: storing the identifier of the inputted fingerprint data in an authorizer in the case the registered fingerprint data is identified with the

Art Unit: 2615

inputted fingerprint data (*It is inherent in the system of Steinberg et al., as modified by Ohmura, that identified fingerprint data correspond to a folder name.*); checking if an instruction inputted to the digital camera is intended for a new fingerprint registration; and registering newly inputted fingerprint data with the fingerprint register in the case the instruction inputted is intended for a new fingerprint registration (see Steinberg et al., Figure 8; Col. 5, Lines 55-67; Col. 6, Lines 1-15).

As to claim 12, Steinberg et al., as modified by Ohmura, teaches the method in accordance with claim 11, further comprising the step of executing the instruction inputted if the instruction is intended to handle a frame of image data associated with an identifier the identifier stored in the authorizer (see Steinberg et al., Col. 3, Lines 61-63; *{The processor executes the instruction of displaying an image on the display. This instruction is intended to handle a frame of image data.}*).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Steinberg et al. (see Patent Number above) in view of Ohmura (see Patent Number above) and further in view of Kramer et al. (US # 6,433,818).

As to claim 3, Steinberg et al., as modified by Ohmura, teaches the digital camera in accordance with claim 1. The claim differs from Steinberg et al., as modified by Ohmura, in that it further requires that said fingerprint sensor comprise a plurality of electrodes and an insulating film for forming capacitors in combination with a finger, and senses the finger's ridges and troughs according to each amount of electric charge accumulated under the electrodes.



In the same field of endeavor, Kramer et al. teaches a fingerprint sensor that comprises a plurality of electrodes (see [0024], Lines 1-3; *{A third capacitor plate requires that two others exist.}*) and an insulating film (see [0024], Lines 1-5, "...dielectric layer...") for forming capacitors in combination with a finger (see [0024], Lines 1-3), and senses the finger's ridges and troughs according to each amount of electric charge accumulated under the electrodes (see [0024]; *{Capacitors inherently produce an electric charge on the outside of the plates.}*). In light of the teaching of Kramer et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fingerprint sensor of Steinberg et al. with the finger print sensor of Kramer et al., because an artisan of ordinary skill in the art would recognize that this sensor can operate at a higher frame rate; consequently, the sensor would be small in size and could be fabricated on a single integrated circuit chip (see Kramer et al., [0027]).

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Steinberg et al. (see Patent Number above) in view of Ohmura (see Patent Number above) and further in view of Safai (US 20020191090).

As to claim 7, Steinberg et al., as modified by Ohmura, teaches the digital camera in accordance with claim 4, further comprising: a password inputting circuit for inputting a password (see Figure 2, keypad "12"; Col. 5, Lines 55-65); and a password storage storing the password (*It is inherent in the system of Steinberg et al. that the password be stored in the camera, such that there would be something to compare what the user enters.*), said controller outputting, in response instruction to output a folder from said memory to a recording medium,

Art Unit: 2615

the folder and the password specific to the folder the recording medium (see Figure 2, card slot “16”; *{It is inherent in the system of Steinberg that digital information (password or folder) be transferred to a memory card on basis of instruction.}*). The claim differs from Steinberg et al., as modified by Ohmura, in that it further requires that the password be specific to the folder and required to open the folder.

In the same field of endeavor, Safai teaches a secure key that maybe used to gain access to digital images (see [0094], Lines 1-11). In light of the teaching of Safai, it would have been obvious to one of ordinary skill in the art at the time the invention was made to prompt a user to enter a key before gaining access to the image folder of Steinberg et al., as modified by Ohmura, because an artisan of ordinary skill in the art would recognize that such a key would provide added security to the camera while making more difficult for someone without access to obtain it (*Applicant is advised to refer to Steinberg et al., Col. 8, Lines 61-67 in which Steinberg et al. teaches the advantages of a password for gaining private access.*).

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Steinberg et al.

As to claim 10, Steinberg et al. teaches the method in accordance with claim 9, further comprising the steps of: comparing the inputted fingerprint data with the fingerprint data registered with the fingerprint register in the case fingerprint data is registered with the fingerprint register (see Col. 6, Lines 5-15); and disabling the digital camera in the case no fingerprint data is identified with the inputted fingerprint data (see Col. 5, Lines 43-50).

Although Steinberg et al. does not explicitly teach turning off the power of the digital camera, it

Art Unit: 2615

would have been obvious to one of ordinary skill in the art to do so, because this provides the same function as disabling the camera; therefore, providing added security to the camera.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Daniels whose telephone number is (571) 272-7362 (can be found at this number after 03/02/2005). The examiner can normally be reached on 8:00 A.M. - 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571) 272-7382 (can be found at this number after 03/02/2005). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AD  
2/23/2005

  
NGOC-YEN VU  
PRIMARY EXAMINER